

Disaster and Emergency Management Resources

Introduction to Tornadoes

Definition

A tornado is a violent windstorm characterized by a twisting, funnel-shaped cloud. It is spawned by a thunderstorm (or sometimes as a result of a hurricane) and produced when cool air overrides a layer of warm air, forcing the warm air to rise rapidly.

Tornado Facts

- Tornado season is generally March through August although tornadoes can occur at any time of year.
- They tend to occur in the afternoons and evenings: more than 80 percent of all tornadoes strike between noon and midnight.
- Tornadoes strike with incredible velocity. Wind speeds may approach 300 miles per hour. These winds can uproot trees and structures and turn harmless objects into deadly missiles, all in a matter of seconds. Mobile homes are particularly vulnerable to tornadoes.
- Injury or deaths related to tornadoes most often occur when buildings collapse, when people are hit by flying objects, or when they are caught trying to escape.
- Tornadoes are most destructive when they touch ground. Normally, a tornado will stay on the ground for no more than 20 minutes; however, one tornado can touch ground several times in different areas.
- An approaching cloud of debris can mark the location of a tornado even if a funnel is not visible.
- Before a tornado hits, the wind may die down and the air may become very still.
- Tornadoes generally occur near the trailing edge of a thunderstorm. It is not uncommon to see clear, sunlit skies behind a tornado.

Tornado Watches and Warnings

- A **tornado watch** is issued when tornadoes are possible in your area. Remain alert for approaching storms.
- A **tornado warning** is issued when a tornado has been sighted or indicated by weather radar.

Adapted from resource material developed by the National Weather Service

WVU Extension Service Disaster and Emergency Management Resources Introduction to Tornadoes Section 5.2 Page 1